REMARKS

In paragraph 6 of the present Office Action, the Examiner indicates that Claims 33 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all limitations of the underlying base claim and any intervening claim. Accordingly, Applicant has proposed amendments to place Claims 33 and 34 in allowable form. Because the proposed amendments do not raise any additional issues and clearly place the claims in condition for allowance, Applicant submits that the proposed amendments are proper and respectfully requests their entry.

In paragraph 3 of the present Office Action, Claims 1-6, 8, 11, 14-15, 17-22, 24 and 27 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,535,513 to *Kao et al.* (*Kao*) in view of U.S. Patent No. 5,166,931 to *Riddle*. That rejection is respectfully traversed, and favorable reconsideration of the claims is requested.

Applicant respectfully submits that exemplary Claim 1 is not unpatentable in view of the combination of *Kao* and *Riddle* because that combination of references does not teach or suggest the following feature of exemplary Claim 1:

> each of said plurality of network adapters includes a serial communication controller including:
>
> means for converting data frames into a bit stream of serial data before transmitting said serial data to said crossbar switch; and
>
> means for converting a bit stream of serial data received from said crossbar switch into data frames of parallel bytes before transmitting said data frames toward an attached network. (emphasis supplied)

The Examiner's attention is respectfully drawn by the underlining set forth above to the specific "directional" features associated with specific data formats in exemplary Claim 1, namely, that the serial communication controller "transmit[s] said serial data to the crossbar switch," receives "a bit stream of serial data ... from the crossbar switch," and transmits parallel bytes "toward an attached network."

With respect to the claimed "serial communication controller", page 3 of the present Office Action notes, "Kao does not expressly teach each of plurality of network adapters includes a serial communication controller; means for converting data frames of serial data and means for converting a bit stream of serial data into data frames of parallel bytes." *Riddle's* serial communication controller 10 of Figure 4 is then cited as teaching the claimed serial communication controller of exemplary Claim 1.

As described by *Riddle* at col. 7, lines 57-62 with reference to Figure 4:

> Serial communications controller 10 ... converts a serial-bit stream representing a message that is received via either serial bus 3 or 4 into a parallel bit stream and presents the result to processor 25 via parallel bus 15.

It is evident from this description that *Riddle's* serial communications controller 10 does not contain the two "means for converting" recited in exemplary Claim 1 in that the serial-to-parallel conversions performed by *Riddle's* serial communications controller 10 do not disclose the specific directional features associated with particular data forms in exemplary Claim 1. That is, the combination of *Kao* and *Riddle* discloses that serial communications controller 10 converts a bit stream of serial data received from serial busses 3 and 4 into parallel bytes before transmitting the parallel bytes on parallel bus 15 to the crossbar switch, while Claim 1 recites "converting data frames into a bit stream of serial data before transmitting said serial data to said crossbar switch." In addition, the combination of *Kao* and *Riddle* discloses that serial communications controller 10 converts a parallel data bytes received from the crossbar switch via parallel bus 15 into serial data before transmitting the serial data toward an attached network on serial busses 3 and 4, while exemplary Claim 1 recites "converting a bit stream of serial data received from said crossbar switch into data frames of parallel bytes before transmitting said data frames toward an attached network. Thus, the combination of cited references teaches against the serial-to-parallel data conversion recited in the present claims in favor of an opposing scheme of serial-to-parallel data conversion.

Because the combination of *Kao* and *Riddle* does not teach or suggest each feature recited in exemplary Claim 1, and in particular, does not teach or suggest the claimed serial

communication controller, Applicant respectfully submits that the combination of *Kao* and *Riddle* cannot render Claim 1 and the claims dependent thereon unpatentable under 35 U.S.C. § 102 or § 103. The foregoing arguments made with respect to Claim 1 are also believed to overcome the rejections of similar Claim 17 and its dependent claims.

Having now responded to each objection and rejection set forth in the present Office Action, Applicant believes all pending claims are now in condition for allowance and respectfully requests such allowance.

Please charge IBM Corporation Deposit Account No. **50-0563** in the amount of $200 for one additional independent claim in excess of 3. No additional fee is believed to be required. If, however, any additional fees are required, please charge those fees to IBM Corporation Deposit Account No. **50-0563**.

Respectfully submitted,

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